

Northwoods Journal – September 2013

A Free Publication about Enjoying and Protecting Marinette County's Outdoor Life

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PESHTIGO RIVER TRAIL PADDLE

Saturday, September 14th
10:00 a.m. – 3:00 p.m.



Paddle the Lower Peshtigo River from the City of Peshtigo boat landing to the County Rd. BB boat landing. LWCD staff will guide the group along the river and answer questions about the area. Bring your own canoe/kayak or use one of our canoes (limited supply of 6 canoes – call to reserve a canoe starting August 28 at 9am).

Please note that this is not a float trip, as we have a schedule to keep - paddling is required to keep up with the group. Beginners not recommended without assistance of an experienced canoe partner, as the trip can be somewhat strenuous and weather can make it difficult at times.

Youth under 18 must be accompanied by an adult, and you must provide your own snacks, water, etc. To register, reserve a canoe, or for more information about the event, please call the Land & Water Conservation office at 715-732-7780.

Marinette County's Clean Boats, Clean Waters Watercraft Inspection Program

By Aleta DiRienzo, Database Specialist/Professional Assistant, LWCD

With boating and fishing season in full swing, Marinette County is stepping up efforts to prevent the spread of harmful **Aquatic Invasive Species (AIS)**. Again this year, a number of heavily-used boat landings and waters containing **Eurasian Watermilfoil (EWM)** and **Zebra Mussels** will be staffed by trained watercraft inspectors for the boating and open water fishing season. Marinette County received a grant from the Wisconsin DNR to hire watercraft inspectors to help the counties efforts to prevent and contain AIS for the past 3 years. They have carried out the vision of the Clean Boats Clean Waters (CBCW) watercraft inspection program in Wisconsin.



The CBCW watercraft inspection program started about 10 years ago as a middle school project called "Milfoil Masters" to stop the spread of EWM in Wisconsin Lakes. This program was so successful at training folks from various lakes and counties that it blossomed into the statewide watercraft inspection and education program it is today. Inspectors, mostly volunteers made contact with over 180,000 water users and inspected nearly 90,000 boats at Wisconsin boat landings in 2010.

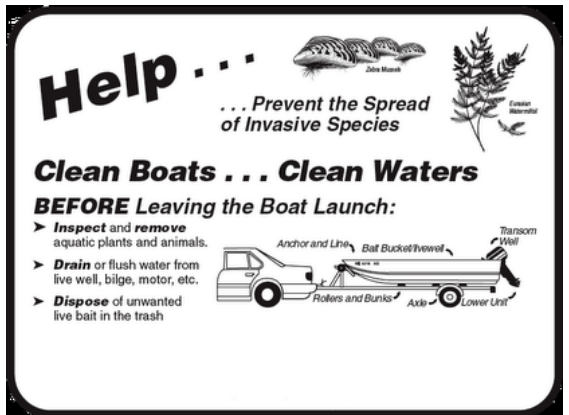
Managed by the Wisconsin DNR and University of Wisconsin Extension Lakes Program, the main goal of the CBCW watercraft inspection program is to educate boaters about AIS and how to prevent their spread. Interaction at boat landings and having a point of contact with water users like fisherman is important to the program's success. The idea is simple and effective. Make contact with water users at boat launches and AIS education and awareness in the community will follow. In addition to being a contact at the boat landings, watercraft inspectors have a variety of duties.



First and foremost is being an AIS educator. Inspectors provide boaters with important invasive species rules and regulations in

Wisconsin. As Wisconsin law now makes it illegal to transport plants, animals, and water via boats, trailers, and other equipment we want to get the word out so boaters are well informed.

Data collection is also a big part of the inspection program. The data that inspectors collect at landings provides us with a snapshot of boater actions, behaviors and AIS awareness. Simple yes and no questions are asked at the landings. A few questions boaters are asked include: after last use did you...Inspect and remove plants? Drain water? Dispose of bait? Are you aware of AIS laws? Over the years, the data trends in the answers to these questions provide a good assessment of boater education and awareness in different areas around the State.



Inspectors also distribute handy informational brochures and ID cards so water users can better recognize a variety of harmful AIS. Lakefront property owners, boaters and other water users should be on the lookout for new infestations of AIS, especially EWM and Zebra Mussels.

28 Marinette County lake and river water bodies, including the heavily-used High and Caldron Falls Reservoirs, contain EWM. These non-native, invasive aquatic plants have been spread from lake to lake most likely from hitching a ride on boats and trailers. It only takes one plant fragment to be introduced into a water body and form the dense populations that we are seeing in some of the Marinette County lakes and river impoundments.

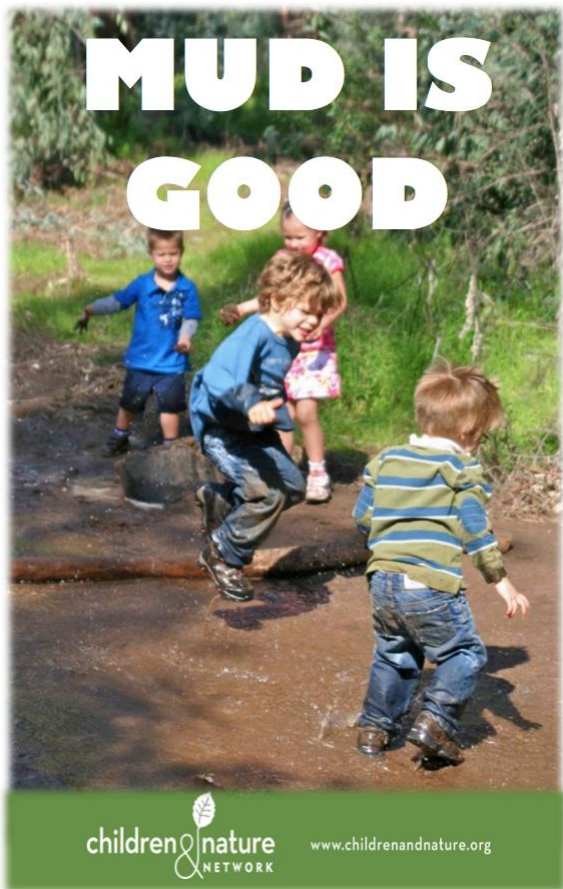
Zebra Mussels are another species we are trying prevent from being introduced and spread. They were discovered in Lake Noquebay in 2006, and priority will be on containment in that lake.



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Mud is Good! Ten Easy Ways to Connect Your Family to the Joy of Nature

By Richard Louv, Co-Founder and Chairman Emeritus of the Children & Nature Network - <http://blog.childrenandnature.org>



Short on Vitamin “N”? Here’s a brief list of nature activities to help you connect your kids, and yourself, to the health and cognitive benefits of nature time. (For a more complete collection of 100 actions, for families, schools, and communities see my book, *Last Child in the Woods*, from which the following suggestions are drawn.)

- **Invite native flora and fauna into your life.** Maintain a birdbath. Replace part of your lawn with native plants. Build a bat house. For backyard suggestions, plus links to information about attracting wildlife to apartments and townhouses, see the National Audubon Society’s [Invitation to a Healthy Yard](#). Make your yard a National Wildlife Federation (NWF) [Certified Wildlife Habitat](#).
- **Revive old traditions.** Collect lightning bugs at dusk, release them at dawn. Make a leaf collection. Keep a terrarium or aquarium. Go crawdadding — tie a piece of liver or bacon to a string, drop it into a creek or pond, wait until a crawdad tugs. Put the garden hose to good use: make a mud hole. (Your kids will sleep well later.)
- **Help your child discover a hidden universe.** Find a scrap board and place it on bare dirt. Come back in a day or two, carefully lift the board (watch for unfriendly critters), and see how many species have found shelter there. Identify these creatures with the help of a field guide. Return to this universe once a month, lift the board and discover who’s new.



- **Encourage your kids to go camping in the backyard.** Buy them a tent or help them make a canvas tepee, and leave it up all summer. Join the NWF’s [Great American Backyard Campout](#).
- **Take a hike.** With younger children, choose easier, shorter routes and prepare to stop often. Or be a stroller explorer. “If you have an infant or toddler, consider organizing a neighborhood stroller group that meets for weekly nature walks,” suggests the National Audubon Society. The American Hiking Society offers good tips on how to hike with teenagers. Involve your teen in planning hikes; prepare yourselves physically for hikes, and stay within your limits (start with short day hikes); keep pack weight down. For more information, consult the [American Hiking Society](#) or a good hiking guide, such as John McKinney’s *Joy of Hiking*. In urban neighborhoods, put on daypacks and go on a mile hike to look for nature. You’ll find it — even if it’s in the cracks of a sidewalk.
- **Be a cloudspotter or build a backyard weather station.** No special shoes or drive to the soccer field is required for “clouding.” A young person just needs a view of the sky (even if it’s from a bedroom window) and a guidebook. Cirrostratus, cumulonimbus, or lenticularis, shaped like flying saucers, “come to remind us that the clouds are Nature’s poetry, spoken in a whisper in the rarefied air between crest and crag,” writes Gavin Pretor-Pinney in his wonderful book *The Cloudspotter’s Guide*. To build a backyard weather station, read *The Kid’s Book of Weather Forecasting*, by Mark Breen, Kathleen Friestad, and Michael Kline.



- **Collect stones.** Even the youngest children love gathering rocks, shells, and fossils. To polish stones, use an inexpensive lapidary machine—a rock tumbler. See *Rock and Fossil Hunter*, by Ben Morgan.
- **Encourage your kids to build a tree house, fort, or hut.** You can provide the raw materials, including sticks, boards, blankets, boxes, ropes, and nails, but it’s best if kids are the architects and builders. The older the kids, the more complex the construction can be. For understanding and inspiration, read *Children’s Special Places*, by David Sobel. *Treehouses and Playhouses You Can Build*, by David and Jeanie Stiles describes how to erect sturdy structures, from simple platforms to multistory or multi-tree houses connected by rope bridges.

Continued next page

CBCW, continued

The county has worked with the lake association to get full time watercraft inspection staff to work the boat landings during boating season. These pesky mussels can spread to other inland waters in their immature form known as “veligers,” which are microscopic and free-floating. As adults, zebra mussels attach to boat hulls, engines aquatic weeds, or other surfaces.



Adult mussels are very hardy and can survive out of water for extended periods depending upon temperature, humidity, wind, and sunlight. Maximum out-of-water survival time in ideal conditions is about 10 days for adults and 3 days for newly settled juveniles. Because Zebra Mussels are spread in both veliger and adult stages of their life, removing plants and vegetation from boats and trailers and draining water from boat and equipment is key to preventing their spread.

These AIS prevention steps boaters should follow are the core of the CBCW program and AIS Rules and Regulations for Boaters and Anglers in Wisconsin.

- **Inspect** and **remove** aquatic plants, animals, and mud from boat, trailer, and equipment before leaving the landing.
- **Drain** all water from boat, motor, live wells, bilge, bait buckets and other containers before leaving the landing.
- **Ice** your catch; don’t leave landing with live fish, bait, or fish eggs.
- **Dispose** of unused bait in trash, not in the water.
- **Rinse** boat and equipment with hot or high pressure water OR **dry** boat for at least five days.

If you would like to learn more about Aquatic Invasive Species or become part of a growing group CBCW watercraft inspection and AIS monitoring volunteers in Marinette County please refer to the County website (Marinette County home page → Departments → Land Information → Aquatic Invasive Species). You can also contact Ryan Parchim, Aquatic Invasive Species Coordinator, at 715-732-7543 or rparchim@marinettecounty.com.



STOP AQUATIC HITCHHIKERS!™

Prevent the transport of nuisance species.
Clean all recreational equipment.

www.ProtectYourWaters.net



Area Farmers' & Flea Markets



Marinette Main Street Farmers Market

Tuesdays from 3-7pm and Fridays 7am to noon on Stephenson Island in Marinette. Open each Tuesday & Friday through October 29th except on days when the island is reserved/events. Call 715-732-5120 for more information.

Crivitz Farmers Market – Held Saturdays from 9am-1pm, June-October outdoors at the Evergreen Market in downtown Crivitz at 412 S. Hwy 141. Offering locally grown fruits and vegetables, honey, maple syrup, handmade soaps and personal care items, fresh-baked breads and baked goods, etc. For more information call 715-854-3837.

Crivitz Flea Market – Through September 1, Village Hall at 800 Henriette Avenue (County A). Every Thursday and July 4 across from the Village Hall at 800 Henriette Avenue (County A) in Crivitz. Vendors can show up on Thursday morning and set up in any unreserved spot. For more information contact Barbara at 715-854-2030.

Oconto Farmers' Market – The Farmers' Market is the first and third Thursday of each month from 7/2 until 10/8, from 11:30am-4:30 pm at the Oconto County Courthouse. For more information, call Hope Kersten at 920-834-7072.

Menominee Community Flea Market

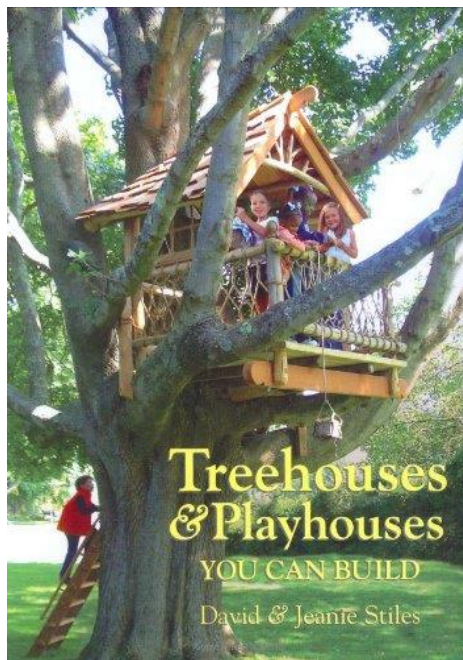
Will be held at the M & M Plaza the second Saturday of every month, May through September, and also on Saturday, October 1st. Sales will run from 7am-2pm, all spaces are free, first come, vendors set up in area by T – straight across from ACE. Questions call Holly at 906-863-4808.

Menominee Farmers Market – The Farmers' Market is located on the corner of 1st Street and 8th Avenue across from the Bandshell. Menominee, MI. June through beginning of October. Saturday market from 9am-1pm, and Thursday market from 3-7pm. For more information, contact Lucy Pier at 906-863-8718 or visit online at menomineefrmkt@hotmail.com.

For more information about area markets, visit Marinette County's tourism website at www.therealnorth.com or call the Mariette/Menominee Area Chamber of Commerce at 715-735-6681.



Nature, continued from page 2



- **Plant a garden.** If your children are little, choose seeds large enough for them to handle and that mature quickly, including vegetables. Whether teenagers or toddlers, young gardeners can help feed the family, and if your community has a farmers' market, encourage them to sell their extra produce. Alternatively, share it with the neighbors or donate it to a food bank. If you live in an urban neighborhood, create a high-rise garden. A landing, deck, terrace, or flat roof typically can accommodate several large pots, and even trees can thrive in containers if given proper care.



- **Invent your own nature game.** One mother's suggestion: "We help our kids pay attention during longer hikes by playing 'find ten critters'—mammals, birds, insects, reptiles, snails, other creatures. Finding a critter can also mean discovering footprints, mole holes, and other signs that an animal has passed by or lives there." (For inspiration, take a look at the finalists and winner of Clif Kids 2012 [Backyard Game of the Year](#) contest).

For more suggestions, in addition to *Last Child in the Woods*, a number of recent books offer great advice, including *Fed Up with Frenzy*, by C&NN's Suz Lipman, *I Love Dirt!* by Jennifer Ward, and the free booklet *A Parent's Guide to Nature Play* by Ken Finch. Also, the classic *Sharing Nature With Children* by Joseph Cornell. Online, *Nature Rocks* is another good resource (www.naturerocks.org).

And of course visit the Children & Nature Network (www.childrenandnature.org) for more ideas for your family and community, including an action guide for change, toolkits to create a Family Nature Club or become a Natural Leader, resources for Natural Teachers and pediatricians — as well as state and national news and the latest research. Connect with the grassroots campaigns and efforts of others around the world. And please tell us how your own family, school, organization, or community connects young people to nature.



An Evening Prairie Walk

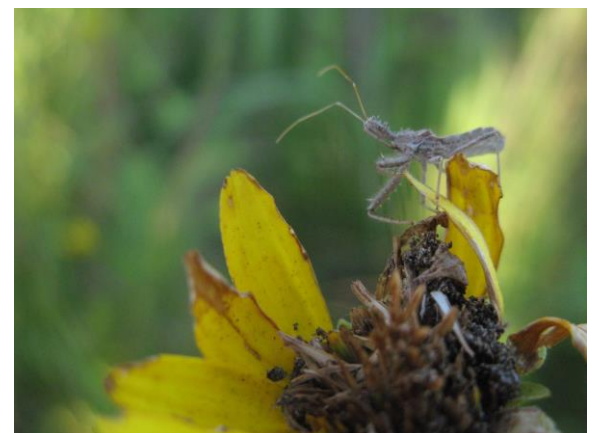
Below are some images from the Prairie Walk, held August 15th at the Harmony Arboretum prairie. 20 people attended.



Linda Warren and Adrian Konell point out a patch of non-native invasive plants to the group



Looking for native prairie plant species



An Assassin Bug waits atop a flower for prey



Examining a Compass Plant

Northwoods Journal Online

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Wisconsin Wildfires: Preventing Home Ignitions

By Jolene Ackerman, WI DNR Wildland-Urban Interface Specialist

Fire is part of the natural cycle of life. Nearly every ecosystem on the globe has been influenced by fire in some way. Wisconsin has many ecosystems that are dependent on fire for their health and perpetuity. Prior to human settlement in Wisconsin, lightning-caused fire influenced the make-up of forests. As European settlements spread across the nation, fire was viewed as a menace and was extinguished whenever possible. Vegetative "fuel" proliferated, resulting in forests overdue for cleansing and left in a condition ready to burn more intensely than that to which they were historically adapted.



Photo courtesy of the Wisconsin Historical Society

For most of the 20th century, the majority of housing was concentrated in urban areas. The later part of the century saw people moving to the outer fringe of cities, areas known as the suburbs. For the last 20 to 30 years, housing development has moved deeper into formally rural areas, sometimes in clusters and sometimes as scattered individual homes. In addition, affluence of recent generations has allowed people to vacation more and purchase seasonal homes. All this development in former agricultural, grassland, marshland, and forested areas is a natural resource management nightmare. For those involved in wildfire control, the addition of homes in these areas seriously changes the dynamics of suppression efforts.



Today, lightning is a very minor cause of wildfire starts in the state. **People now cause over 90% of wildfires**, with some estimates being closer to 98%. At the turn of the 20th century, people intentionally started wildfires to clear land for agriculture or settlement or to reduce logging slash. As tracks were laid across the state, railroads took over the number one cause of wildfire starts. **By 1980, debris burning transitioned into the main cause of wildfires and remains so today.**

The combination of people starting wildfires and people living in fire-prone areas puts human life and property at risk. Every year people are injured as they try to suppress fires they inadvertently started. Occasionally people suffer serious burns, heat stress, or heart attacks during these efforts. And sometimes people die, as evidenced by the deaths of a firefighting team in Yarnell, Arizona this June.



Flames ravage a home in Highland Township, Wis. The blaze had consumed nearly 9,000 acres in Douglas and Bayfield counties. Photo courtesy of Associated Press.

Each year dozens of structures are destroyed and hundreds more are threatened by wildfires. So far this year, there have been 528 fires in Wisconsin that have burned an accumulated 8,182 acres. In May, one of the largest wildfires to hit Wisconsin in over 33 years was the Germann Road fire. It consumed 7,442 acres and destroyed 47 structures (17 of them residences) in the Towns of Gordon and Highland in Douglas County. Thanks to the rapid response, good communication and suppression efforts, no injuries or fatalities resulted and over 77 structures were saved.



The original "Smokey Bear" with an educational poster, courtesy of the Wisconsin Historical Society

The bottom line is that fire is inevitable. It's not a matter *if* a fire will occur, but *when*. With that knowledge, the task at hand is teaching residents and visitors of wildland-urban interface areas ways to live without starting a wildfire and being able to survive a wildfire when one occurs.

Firewise is a proactive approach to wildfire readiness. In this approach, wildfire control personnel and natural resource managers provide technical assistance through advice and recommendations. During a wildfire, they will provide emergency response. **Yet ultimately, Firewise puts the primary responsibility for wildfire readiness on individual citizens and community infrastructure.** When wildfire considerations are broken down to the community level, it is much easier to plan for safer community design and effective emergency response. Homeowners are best suited for preparing their property for wildfire **before** one strikes.

There are three main *Firewise* topics for consideration in fire-prone areas: 1) **Buildings.** How flammable is your residence and outbuildings? 2) **The surrounding vegetation.** How easily could a fire spread from vegetation to buildings? 3) **Access.** Could firefighters get to your residence if there were a fire in the area?

Firewise recommendations for these topics focus

on the **Home Ignition Zone (HIZ)**, an area extending 100 to 200 feet beyond each side of **all buildings on a property.** If properly modified, the HIZ provides enough distance between buildings and a wildfire to go from a situation where fire can easily spread to buildings, to a situation where the vegetation has been modified enough to become a fuel break. This increases the chance of buildings being able to survive a wildfire without outside help.



A well-managed Home Ignition Zone (HIZ) helps keep wildfire away. Photo from the Firewise Landscaping Guide.

Within the HIZ are three main areas where fuel reduction efforts should be concentrated:

Buildings and Just Beyond

Start by looking at your home and any other buildings on your property. Remember that anything attached to a building is part of that building. Roofs, rain gutters, fences, and decks are natural traps for leaves, pine needles, and embers from a fire. These areas should be kept free of all material that could allow embers to smolder and start a fire. It is especially important to keep debris cleaned out from under decks as well as on top. The first 3 to 5 feet around all buildings should be kept free of all flammable materials, including any type of vegetation or wood mulch. Think of this as the "No Grow Zone." If possible, these areas should be filled in with decorative stone or some other non-flammable material, even bare soil.



A 3-to-5-foot "fuel free zone" keeps flames away from siding. Photo from the Firewise Landscaping Guide.

Defensible Space

The area within 30 feet around all buildings is called **Defensible Space**. If modified properly, this area can keep low intensity surface fire from reaching buildings. It can also provide a relatively safe area for firefighters to work in if they are able to help protect a residence. This area should be kept mowed short and raked free of fallen leaves and pine needles. Flower beds should be cleared of last year's dead, dry vegetation. Plantings should be carefully spaced and have more fire-resistant qualities - deciduous plants, shrubs, and trees are generally more fire-resistant than evergreens. Red pine and jack pine are the most flammable trees in the Lakes States and should be kept to a minimum in this area. Fuel breaks can be created by incorporating gravel, rock, brick, paving or a water feature into

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Hydraulic Harvester Offers Hope for EWM Control

By Chuck Druckrey, Water Resource Specialist, LWCD

In 2012, the Marinette County LWCD received a Wisconsin Aquatic Invasive Species Control Grant to build and operate a hydraulic harvester to help control Eurasian watermilfoil (EWM) on area lakes. However, delays in equipment delivery and technical problems prevented the harvester from being put into service last summer. I am happy to report that over the winter months, the technical issues were resolved, and the harvester was up-and-running this year (below).



The hydraulic harvester is used for diver-assisted manual harvesting of aquatic invasive plants. It consists of a used 24-foot pontoon boat outfitted with an engine-driven water pump & air compressor, suction hose, separating tank, and filtration system. In use, a diver on the lakebed controls a suction hose, uprooting and feeding Eurasian watermilfoil (EWM) into the hose by hand. The plants are transported to the surface and deposited on a screen where an operator can bag them for disposal. The water is then filtered to remove any plant fragments before it's returned to the lake.



Land Information Department staff Anna Cisar and Ryan Parchim prepare EWM for disposal

As you can imagine, hydraulic harvesting is a very labor-intensive management tool. In practice, a diver can only harvest about 200 square feet of dense EWM per hour. As such, this is not the appropriate tool for harvesting acres of EWM. Hydraulic harvesting is best used to manage scattered EWM plants and colonies that are too small to be managed using other methods.



A stand of EWM to be harvested



Chuck Druckrey (author) harvesting EWM using the suction hose apparatus

Despite these limitations, hydraulic harvesting has many benefits. A diver can be very selective and remove only the invasive species while leaving the native plants in place. Applied carefully, hydraulic harvesting also reduces plant fragmentation and removes the entire root system.



The county's AIS grant called for using the hydraulic harvester on Beecher, Thunder, and Little Newton Lakes. In Beecher, the Lake District is still working to reduce the EWM population to a more manageable size through other methods so the harvester was not used in 2013. On Little Newton Lake a spring herbicide treatment was so successful that the harvesting crew was unable to find even a single EWM plant despite many hours spent searching.

While that's good news, experience shows that EWM is likely hanging on somewhere in the lake and will probably be back. On Thunder Lake, a spring herbicide treatment knocked the EWM population back and the hydraulic harvester was used to remove isolated EWM plants and those that survived the herbicide use.

On Thunder Lake, a test plot was also established to track changes in the plant community. All EWM in the test plot was harvested then separated from native plants, dried, and weighed. This will be repeated annually to track EWM response to hydraulic harvesting. Additional test

Continued next page

Wildfires, continued

a landscape design. Tree limbs should be pruned back at least 10 feet from all buildings. Evergreens need to be pruned up 6 to 10 feet from the ground. Firewood and other flammable materials should be kept out of this area.

Outlying Areas

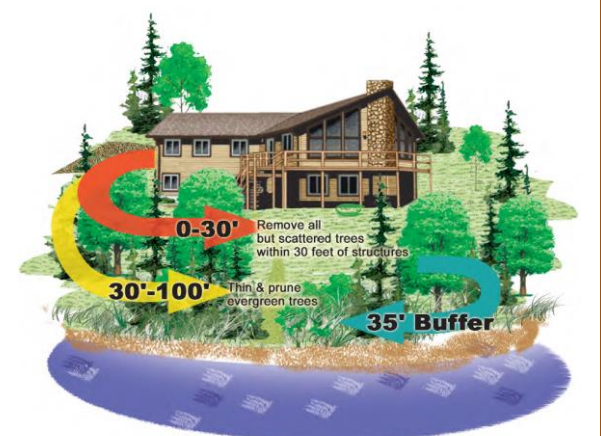
This zone extends out 30 to 100 feet beyond buildings. When a residence is built in a pine forest or pine plantation, this zone extends out to 200 feet. Tree limbs should be at least 10 feet apart and taller trees should have all limbs pruned within six feet of the ground. All dead or dying limbs should be removed throughout tree canopies. Dead, dying, and diseased trees should be removed from this area as well. Talk to your neighbors. Wildfire doesn't respect property boundaries. By working together to manage wildland fuels, wildfire risk can be reduced even further.



Fire burns faster uphill, making the removal of vegetation farther out essential to slow the fire down. Photo from the Firewise Landscaping Guide.

The Importance of Maintenance

Once wildland fuels have been mitigated in the Home Ignition Zone, the focus then shifts to maintenance of the area to keep the benefit of its protection. People are encouraged to keep a schedule of seasonal maintenance where roofs and gutters are cleaned and leaves and pine needles are raked. Spring is when most wildfires occur in Wisconsin and so clean up at this time of year is essential. Composting leaves, pine needles, branches, and grass clipping is a safe disposal alternative to burning. Burning this debris is a last resort and should be restricted to times when fire danger is at its lowest.



For more information, please visit:

- <http://firewise.org>
- <http://dnr.wi.gov/topic/ForestFire/property.html> - Wisconsin DNR Forest Fire page
- <http://dnr.wi.gov/files/pdf/pubs/fr/FR0417.pdf> - Firewise Landscaping Guide
- <http://dnr.wi.gov/files/pdf/pubs/fr/FR0463.pdf> - Forested & Firewise brochure
- <http://dnr.wi.gov/files/pdf/pubs/fr/FR0419.pdf> - Protect your Waterfront Home from Wildland Fire

For more information now, please visit dnr.wi.gov/topic/ForestFire/property.html or firewise.org.



Autumn Leaves & Colors Will be here Soon!

Information from <http://dnr.wi.gov/org/caer/ce/eeek/veg/trees/treestruicolor.htm>



Why do Leaves Change Color?

While you were playing in the hot sun during summer vacation the trees on the streets, in the parks, and in the forests were working hard to keep you cool. To feed the shiny green leaves that make shade, trees use sunlight to convert water and carbon dioxide into sugar. This is called photosynthesis.

Now its autumn and trees need to take a break from all that photosynthesizing. When leaves change color from green to yellow, bright orange, or red, you'll know that trees are beginning their long winter's rest.

Where do leaf colors come from?

Leaf color comes from pigments. Pigments are natural substances produced by leaf cells. The three pigments that color leaves are:

- Chlorophyll (green)
- Carotenoid (yellow, orange, and brown)
- Anthocyanin (red)

Chlorophyll is the most important of the three. Without the chlorophyll in leaves, trees wouldn't be able to use sunlight to produce food. **Carotenoids** create bright yellows and oranges in familiar fruits and vegetables. Corn, carrots, and bananas are just a few of the many plants colored by carotenoid. **Anthocyanins** add the color red to plants, including cranberries, red apples, cherries, strawberries and others.

Chlorophyll and carotenoid are in leaf cells all the time during the growing season. But the chlorophyll covers the carotenoid -- that's why summer leaves are green, not yellow or orange. Most anthocyanins are produced only in



autumn, and only under certain conditions. Not all trees can make anthocyanin.

How do leaves change color?

As the Earth makes its 365-day journey around the sun, some parts of the planet will get fewer hours of sunlight at certain times of the year. In those regions, the days become shorter and the nights get longer. The temperature slowly drops. Autumn comes, and then winter. Trees respond to the decreasing amount of sunlight by producing less and less chlorophyll. Eventually, a tree stops producing chlorophyll. When that happens, the carotenoid already in the leaves can finally show through. The leaves become a bright rainbow of glowing yellows, sparkling oranges and warm browns. What about red leaves? Read on.

Do leaves change because of weather?

Perhaps you've noticed that in some years, the red fall colors seem brighter and more spectacular than in other years. The temperature and cloud cover can make a big difference in a tree's red colors from year to year. When a number of warm, sunny autumn days and cool but not freezing nights come one after the other, it's going to be a good year for reds. In the daytime, the leaves can produce lots of sugar, but the cool night temperatures prevent the sugar sap from flowing through the leaf veins and down into the branches and trunk.

Anthocyanins to the rescue! Researchers have found out that anthocyanins are produced as a form of protection. They allow the plant to recover nutrients in the leaves before they fall off. This helps make sure that the tree will be ready for the next growing season. Anthocyanins give leaves their bright, brilliant shades of red, purple and crimson. The yellow, gold and orange colors created by carotenoid remain fairly constant from year to year. That's because carotenoids are always present in leaves and the amount does not change in response to weather.



The amount of rain in a year also affects autumn leaf color. A severe drought can delay the arrival of fall colors by a few weeks. A warm, wet period during fall will lower the intensity, or brightness, of autumn colors. A severe frost will kill the leaves, turning them brown and causing them to drop early. The best autumn colors come when there's been:

- a warm, wet spring
- a summer that's not too hot or dry
- a fall with lots of warm sunny days & cool nights

Why do leaves fall?

A tree's roots, branches and twigs can endure freezing temperatures, but most leaves are not so tough. On a broadleaf tree -- say a maple or a birch -- the tender thin leaves, made up of cells filled with water sap, will freeze in winter. Any plant tissue unable to live through the winter must be sealed off and shed to ensure the tree's survival. As sunlight decreases in autumn, the veins that carry sap into and out of a leaf gradually close. A layer of cells, called the separation layer, forms at the base of the leaf stem. When this layer is complete, the leaf is separated from the tissue that connected it to the branch, and it falls. Oak leaves are the exception. The separation layer never fully detaches the dead oak leaves, and they remain on the tree through winter.

Evergreen trees -- pines, spruces, cedars and firs -- don't lose their leaves, or needles, in winter. The needles are covered with a heavy wax coating and the fluids inside the cells contain substances that resist freezing. Evergreen leaves can live for several years before they fall and are replaced by new growth. On the ground, fallen leaves are broken down by bacteria, fungi, earthworms and other organisms. The decomposed leaves restock the soil with nutrients, and become part of the spongy humus layer on the forest floor that absorbs and holds rainfall. In nature, nothing goes to waste!

Harvester, continued

plots will be established on Little Newton and Beecher Lakes.

Our first summer operating the hydraulic harvester has been a good learning experience. As is often the case, what looked good on paper didn't work so well in the field, or in this case, under water! However, after some simple equipment modifications and changes in operating procedures, we were making excellent progress. Next year we should hit the ground running.

The plan for 2014 is to start harvesting in mid-May when most of the native plants are still small and the EWM is less prone to fragmenting. A second round of harvesting is planned for late summer. With any luck, a few days of hydraulic harvesting each year will eliminate the need for routine herbicide treatment on these Marinette County Lakes.

For more information about efforts to eradicate EWM and other invasive aquatic species in Marinette County's lakes, contact Chuck Druckrey at cdruckrey@marinettecounty.com or call 715-732-7528.

You can also visit the Marinette County website at www.marinettecounty.com home page → Departments → Land Information → Aquatic Invasive Species.

Join us in October for the 2nd Annual Halloween Family Fun Fest at the Harmony Arboretum!

From 3-7p.m. on Saturday, October 19, visit the Harmony Arboretum for a 'spooktacularly' good time! Family event with activities, refreshments, and games. See page 8 Harmony calendar for more information. Below are photos from last year's event!



Ghost's circle of friends!



Children enjoying painting and decorating carved pumpkins, with the help of volunteers and parents

For questions or to volunteer for this event, please call the UW-Extension office at 715-732-7510. You can also email lwarren@marinettecounty.com.

Northwoods Journal

Volume 11, Issue 4

The *Northwoods Journal* focuses on various outdoor recreation opportunities and local environmental topics to inform readers about natural resource use, management, and recreation in Marinette County.

Published in cooperation by:

- Marinette Co. Land & Water Conservation
- Marinette Co. Parks & Outdoor Recreation
- Marinette Co. UW-Extension

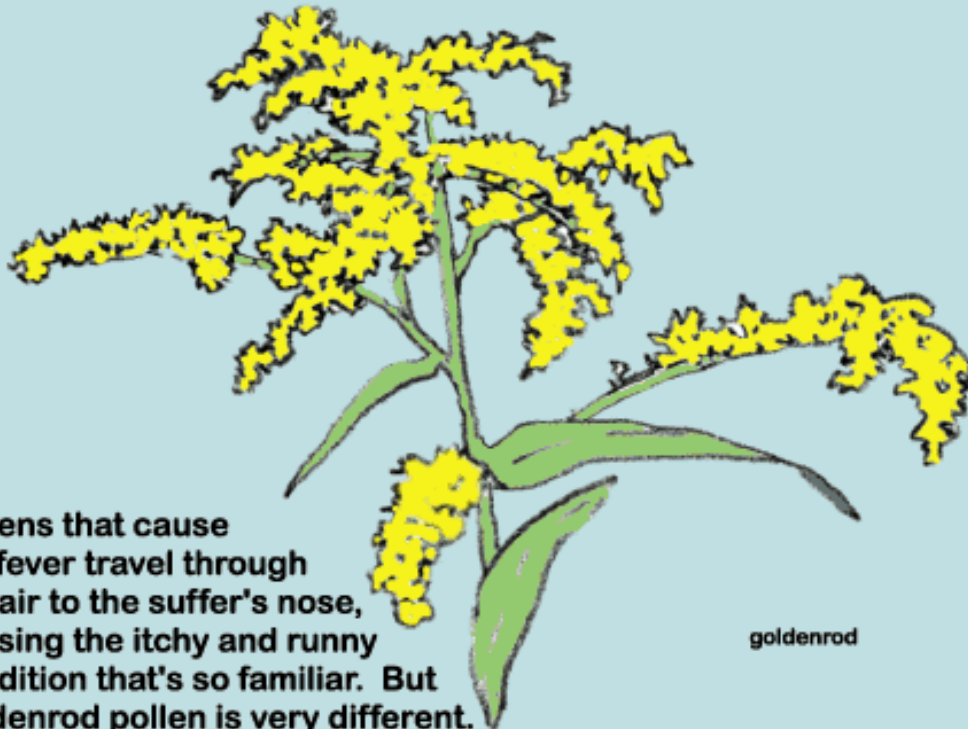
UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA. To ensure equal access, please make requests for reasonable accommodations as soon as possible prior to the scheduled program. If you need this material in another format, please contact the UW-Extension office at 715-732-7510.

Please send comments to:
Marinette County LWCD
1926 Hall Ave, Marinette, WI 54143
abartels@marinettecounty.com



Not Guilty

The many different goldenrods have often been credited with part of the misery for hayfever sufferers. But a quick look at the facts finds goldenrods not guilty!



Pollens that cause hayfever travel through the air to the suffer's nose, causing the itchy and runny condition that's so familiar. But goldenrod pollen is very different. Goldenrod pollen is sticky and heavy compared to airborne pollens. Insects visiting a flowering goldenrod, can't help but get some sticky pollen grains on their body and then they transport them to the next plant they visit. Goldenrod pollen does travel through the air but on insects, not air currents, and not to your nose.

The Electronic Naturalist @ <http://www.enaturalist.org>
Roger Tory Peterson Institute of Natural History

© 2008 RTPi

Goldenrod has gotten a bad rap for a long time. Many people have assumed since it is blooming in late summer/early fall when their hay fever really kicks up, that it must be this plant. Now you know better!

There are many different kinds of goldenrod species in North America and they all have small, yet fragrant, attractive flowers for insects. Goldenrod flowers have a heavy, sticky pollen that easily sticks to visiting insects and is then carried to other plants for pollination. If you closely watch insects as they visit goldenrod, you'll often see them covered in pollen grains.



You can see individual cattail pollen grains on this fly.

Ragweed (shown below) and many other flowering plants have a different pollen dissemination strategy. These plants have small, "uninviting" flowers with lots of light, easily-airborne pollen for air transfer. *They don't need insects to visit and move their pollen to another flower – the breeze does it for them.* Since it's the airborne pollens that cause hay fever suffers so much grief, goldenrod is definitely not guilty!



Information from the Roger Tory Peterson Institute of Natural History - www.rtpi.org

Changes to Environmental Poster Contest!



Every fall the Land & Water Conservation Division along with the Wisconsin Land & Water Conservation Association (WLWCA) sponsors an environmental poster contest. To better serve the teachers and 4-H leaders the contest will be moved to spring. This will give teachers and leaders more time to work with their students and fit the contest into their curriculum.

In January after Winter break the information will go out to the schools regarding the poster contest and the theme for 2014 from the National Association of Conservation Districts (NACD). The theme is **"Dig Deeper – Mysteries in the Soil"**. Soil is an amazing substance. A complex mix of minerals, air, and water, soil also teems with countless micro-organisms, and the decaying remains of once-living things. Soil is made of life and soil makes life.

The posters will have to be returned to the Land & Water Conservation Division, 1926 Hall Avenue, Marinette, WI 54143-1717 by February 7, 2014 for the local contest. The Lake Michigan Land & Water Conservation Association will sponsor the area contest in the middle of February and the winners from the area contest will be entered into the State Contest in conjunction with the WLWCA Annual Conference held in March, 2014.

Please check the Marinette County website later this fall for more information and entry information. Go online to www.marinettecounty.com → Departments → Land Information → Environmental Education → Environmental Poster Contest.

Questions? Contact Aleta DiRienzo at adirienzo@marinettecounty.com or call the Land & Water Conservation office at 715-732-7780.

*"To the farmer, soil is where crops grow.
To the engineer, soil is a foundation upon which to build.
To the ecologist, soil supports communities of living things.
To the archaeologist, soil holds clues to past cultures.
To the city dweller, soil nurtures grass and gardens.
To the soil scientist, soil is all of these things.
Soil has been called "the skin of the earth" because it is the thin outermost layer of the Earth's crust.
Like our own skin, we can't live without soil."*

Source: Soil Science Society of America



Area Events Calendar

- May 28-Sept.3 Area Museums Open.** Marinette & Menominee County Historical Museums, Peshtigo Fire Museum, Amberg Historical Complex, Busville Doll Museum (Crivitz), Land of Oz Museum (Wausaukee) & West Shore Fishing Museum (M-35 north of Menominee, MI). Visit www.therealnorth.com/entertainment/museums.
- September 1 Ice Cream Social at West Shore Fishing Museum.** 12-4p.m. Popular family and community picnic offering live music, huge raffle, brats, pie and ice cream, draft root beer, kids' games and play area. Located on M-35 15 miles north of Menominee.
- September 1 First Annual Tyler Walk Softball Tournament.** Held August 30-Sept.1, at Higley Field in Marinette. Music will be provided all weekend, food and refreshment from 8am – 10pm. Free admission to park. Proceeds to help local youth in surrounding communities. Donations can be made to "Tyler Walk Memorial Fund" at Stephenson National Bank. Fee for team \$150. For tourney info call Trisha Walk 856-265-1955.
- September 7 Peshtigo Historical Days.** Firetower walk/run at 8am with registration from 6:30-7:45am. Parade starts at 10:30am. All main events at Badger Park – no admission charged. Activities include: horseshoe tournament, live music from 11:30am to 9:30pm, craft booths, food, balloon jumping equipment and games all day
- September 14 Viva Itali Night.** 4pm Sons of American Legion Post 146 – 818 1st Street, Menominee. Cocktails @ 4pm, Dinner at 5pm. \$10 per person. Ticket Sale at Legion.
- September 28 Crivitz Fall Harvest-fest Craft Show.** Over 55 crafters displaying their items at the Crivitz High School from 8:30am-2pm with concessions sold, fall decorating needs and bake sale. No entry fee, please bring a food item for the Crivitz Food Pantry. For more information contact Debbie Atwood at 715-854-2891.
- September 28 Forgotten Fire Winery Anniversary Event.** 11am-4:30pm. Live music, grilling for charity, prize drawings, and more! Location: N2393 Schacht Road, Marinette. Call 715-582-FIRE (3473) for more information.
- Thru October 'Tour de Taco' Ride.** Weekly bike ride on Thursdays at 6pm, join us for a one hour ride with beverages and tacos after the ride at Cycle Path, 2329 13th Street, Menominee. Questions call 906-863-9361 or visit online at cyclepath360.com.
- October 5 Wausaukee Fall Festival.** 9am Village-wide event with crafters, vendors, bake sales, kids' games, food, music, sidewalk sales, farmers markets & more! Length all along hwy. 141 through Wausaukee.
- October 12 13th Annual Holiday Craft Fair.** Crafters and vendors wanted for the Annual Holiday Craft Fair at the Grace Lutheran Church, Pembine, WI. For more information or application call Shirley @ 715-324-5464 or Nada @ 906-221-1921.

For upcoming winter events, visit the Marinette County Events Calendar at www.therealnorth.com or the Marinette-Menominee Chamber of Commerce at www.mandmchamber.com.



Update - Children's Learning Garden at Harmony Arboretum



Inside the chipmunk's tunnel – roots 'underground'

Things are moving along at the Children's Learning Garden (CLG) this summer! The inside of the Chipmunk's tunnel is still undergoing improvements, including roots (grapevines, above) on the ceiling, and the ant & beetle diorama should be in place by fall. Solar-powered lighting for signage will also be installed inside the tunnel. We hope to finish it completely by next summer, but feel free to stop by and visit anytime!

A group from Crivitz Youth Inc. participated in a program about habitat on August 15th, and learned about biomes, adaptations, and how wildlife populations are affected by habitat loss. As they explored the gardens and wetlands during a scavenger hunt (at right), they found all sorts of interesting things and even played on the newly installed 'sea serpent' element.

For more information about the CLG or to vol-

unteer your talents, please call Linda at the UW-Extension office at 715-732-7510 or Anne in the Land & Water Conservation office at 715-732-7784. Have a great rest of 2013, and we'll see you in 2014!



Above: children explore the wetlands area
Below: the Native American Garden in bloom



Harmony Arboretum
Fall Schedule of Events



Located seven miles west of the City of Marinette off of Highway 64, then ½ mile south on County E. All programs are free and at Harmony Arboretum unless otherwise stated. For more information, call UW-Extension at 715-732-7510 or Land & Water Conservation at 715-732-7780.

September 7 – Plant Sale, 9a.m.-noon. Plants grown by Northern Lights Master Gardeners will be for sale at the Harmony Demonstration Gardens. This is the perfect time for planting perennials.

September 10 – Salsa Night, 6-8 p.m. Back by popular demand, this fun and flavorful event celebrates both the end product and the plants we grow to make it success-fully. Join UW-Extension staff to learn about safe salsa recipes for canning, growing the tomatoes, peppers, onions, and herbs that go into salsa. And, of course, be ready to sample all different types of salsas. Admission fee: one bag of chips per family.

September 24 – Apple Tasting Workshop, 5-7 p.m. Location: Marinette Courthouse Annex. Second in a series of 3 apple tasting workshops to sample early, mid-season and late apples. Instructor: Tony Dembski, owner of Maple Valley Orchard, Gillett, who grows many old fashioned varieties of apples not available elsewhere.

October 5 – Closing the Garden for Winter 10a.m. – noon. Join Scott Reuss, UW-Extension Horticulture Agent, for a realistic approach to getting your garden and landscape areas ready for winter and to set them up for a great growing season in 2014.

October 10 – Astronomy at the Arboretum 7:30-8:45 p.m. Spend an evening under the stars! Introduction to stars, constellations, star lore, and other space-related topics - includes a stargazing tour. Dress for the weather, hot beverages will be provided; if inclement weather, event will be cancelled. Free public program. Call 715-732-7780 for more information. Another program scheduled for November 7 from 6:15-7:30 p.m.

October 19 – Halloween Family Fun Fest, 3-7 p.m. The family event for kids of all ages. A few spooky things to keep you guessing, and enough activity choices to keep all family members busy and active for your entire visit. Hands-on nature crafts and pumpkin carving for children and adults. Refreshments available. Check the website nearer the date for more program details (see page 6 for photos from last year!).

October 22 – Apple Tasting Workshop, 5-7 p.m. Location: Marinette Courthouse Annex. Third program in a series (See Sept. 24 description).

